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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,876	02/10/2000	Eddie D. Sowle	163.1173US11	4490

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EXAMINER

YU, GINA C

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 05/20/2003

1.8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No:

09/501,876

Applicant(s)

SOWLE ET AL.

Examiner

Gina C. Yu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-19, 21-27 and 29-54 is/are pending in the application.
- 4a) Of the above claim(s) 30-49 and 52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-19, 21-27, 29, 50, 51, 53 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Receipt is acknowledged of response filed on February 24, 2003. Claims 1-9, 11-19, 21-27, 29-54 are pending. Claim rejection under 35 U.S.C. § 103 as indicated in the previous Office action dated November 17, 2002 is amended to meet the limitation of the new claims, but the substance of the rejection is otherwise maintained.

Election/Restrictions

In response to applicants' argument that no serious burden is imposed to search all pending claims, examiner reiterates that the claims present two distinct groups of inventions and new search and further consideration are necessary for a meaningful examination.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-9, 11-19, 21-27, 29, 50, 51, 53, and 54 are rejected under 35 U.S.C. 103(a) as obvious over Gladfelter et al. (U.S. 5,358,653) ("Gladfelter") in view of Holdt et al. (US 4, 683, 072) and Kitko (U.S. 4,248,827).

Gladfelter teaches chlorinated solid rinse aid useful in warewashing. See abstract. Examples disclose the preparation of encapsulated active chlorine compound comprising sodium dichloroisocyanurate dihydrate and sodium sulfate. See instant claims 4, 9, 11, and 17. Using monosodium orthophosphate (sodium dihydrogen phosphate) is also suggested. See col. 5, lines 1 – 11. See instant claim 15. The encapsulated chlorine source of the invention comprises the core of active chlorine with

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an inorganic intermediate coating and an outer organic coating. See col. 4, line 60 – col. 7, line 35. See instant claim 44. The dimensions and shapes of the solid composition are disclosed in col. 3, lines 37 – 57. See instant claims 3. The reference teaches the method of using the invention, which include introducing the aid into potable water in rinse cycles at relatively neutral pH, wherein the concentration of the active chlorine is about 3 to 50 ppm. See col. 2, lines 29 – 49. The reference also teaches using higher chlorine concentration for more effective sanitization. The reference further provides that the concentration required may vary depending on the temperature of the water. See col. 12, line 50 – col. 13, line 7. Given these general teachings of warewashing, the recited method steps in claim 8 (b) are viewed obvious for a full sanitization. The reference also teaches that, in the process of the preparation of the composition, the encapsulated chlorine and additives are “thoroughly mixed” before hardening. See col. 12, lines 5 – 32. Example 13 teaches to mix the ingredients “until the dye [is] evenly dispersed.” See also Example 18, which teaches to mix the raw materials into a homogeneous composition. See instant claims 53 and 54.

Gladfelter further teaches that a dye may be optionally added such that the color of the composition does not change upon the activation of chlorine releasing agents. See col. 11, lines 15 – 53. The reference states that dyes are used to “provide for a more pleasing appearance of the rinse aid.” The reference lacks the teaching of the changing or depletion of color over a period of time used to disinfect a substrate.

Holdt teaches a disinfectant tablet comprising 5-30 % by weight of a chlorine-releasing compound; 5-15 % by weight of a dye; an organic disintegration rate

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regulator; and inorganic alkali metal salts such as sodium sulfate. See Example 1; col. 1, line 65 – col. 2, line 40. See Drawings and col. 5, lines 51 – 68 for the shape and weight of the tablets. While the size or dimension of the tablets are not taught, examiner views it obvious for a skilled artisan to discover an optimum size of the tablet for desired strength and effectiveness. See instant claims 3 and 5. The tablet is said to comprise substances to minimize the premature interaction of the components and has improved shelf life. See col. 1, lines 47 – 63; col. 2, lines 22 - 26. The reference teaches that dyes that are sensitive to chlorine change their color more or less rapidly or fade out in the presence of hypochlorite. See col. 2, lines 58 – 66. The reference further states that in addition to an impression of cleanness, dyes are useful to provide an indication of the effectiveness of the tablet. See col. 2, line 58 – col. 3, line 3; Examples. See Example 1, for the use of sodium dichloroisocyanurate dihydrate. See instant claims 4, 6, 11.

Kitko teaches method for sanitizing toilets comprising hypochlorite agent and dye agents are dispensed into the toilet flush water, wherein the dye is oxidized from a colored state to a colorless state within 5 seconds to 10 minutes after contact with the hypochlorite. See col. 1, line 57 – col. 2, line 20. Sodium dichloroisocyanurate dihydrate of instant claim 3 is among the sanitizing hypochlorite agents for the invention. See col. 2, lines 21 – 49. The reference teaches that the dye should be present in a ratio of available chlorine:dye of from 2:1 to about 150:1, preferably from about 5:1 to 25:1. The reference also teaches that the amount of dyes depend on the intensity of the color, and the quickness with which it is desired to have the color disappear, while

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also suggesting that wide variety of dyes can be used. See col. 3, lines 34 – 52. The reference also illustrate the testing of dyes for the time interval to change its color to colorless stage at catalyzed and uncatalyzed chlorine level of 5 ppm, at pH 6 and 9. See col. 3, line 60 – col. 4, line 58. While FD&C dyes, such as FD&C no. 3, are tested, the reference teaches that dyes provide the color change within a period of from about 5 seconds to 10 minutes. See instant claim 14. Using FD&C dye no. 40 is viewed as an obvious choice for a desired color of the composition or solution. See instant claims 13 and 23. Examiner views that given this information, one of ordinary skill in the art would have discovered, by routine experimentations, the optimum ratio of chlorine to dye required to produce the color-to-colorless signal within a desired time frame.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compositions of Gladfelter by incorporating the oxidizable dyes as suggested by Holdt and Kitko because of the expectation of successfully producing sanitizing composition which, upon the oxidization of the dyes upon the contact with hypochlorite changes the color of the solution and provides users the visual signals of the activity of the sanitizing agents.

Response to Arguments

Applicant's arguments filed on February 24, 2003 have been fully considered but they are not persuasive.

Applicants argue that Gladfelter, Holdt and Kitko are not combinable, asserting that disinfecting tablets for warewashing and toilet cleaning have different utility.

Examiner respectfully disagrees. In response to applicant's argument that the cited

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references are nonanalogous arts, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Gladfelter and Holdt references are classified under oxidative bleaching art. All of the Gladfelter, Holdt and Kitko inventions are directed to chlorine bleaching tablets containing dyes, which cleans and disinfect household substrates, such as sink, upon contact with water. Applicants' inventions are also chlorine disinfecting compositions containing dye. Examiner asserts that the cited references are analogous since they are both in the field of and pertinent to applicant's endeavor - chlorine bleaching.

Applicants also argue that no motivation exists to modify the Gladfelter invention. Applicants specifically argue that the reference, which prefers the stability of the dyes for a more pleasing appearance of the rinse aid, teaches away from the proposed modification. Examiner respectfully disagrees. The passage in Gladfelter, col. 11, lines 26 – 37 states:

The present rinse aid composition may also optionally comprise adjuvants that enhance performance, stability, aesthetic appeal, processing, packaging, or household acceptance. Such materials include, for example, optional coloring agents or dyes, and perfumes or fragrances. *These materials should be selected from dyes and perfume varieties which are stable against degradation in the presence of strong chlorine releasing agents.* Where used, these optional components can be provided in quantities well known to those of ordinary skill in the art. (emphasis inserted)

Examiner takes the position that the stability which Gladfelter refers here is the stability of the dye during the storage, not during the disinfecting process. Even if the Gladfelter invention is modified as examiner proposed, the pleasing appearance of the bleaching solution is still retained during the active disinfecting process.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gina C. Yu whose telephone number is 703-308-3951.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 703-305-1877. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

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308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Gina C. Yu
Patent Examiner
May 16, 2003



SREENI PADMANABHAN
PRIMARY EXAMINER

5/18/03